

ENTERED

PCT09

RAW SEQUENCE LISTING DATE: 03/07/2002 PATENT APPLICATION: US/09/830,338 TIME: 15:41:41

Input Set : A:\Ikeda Sequence Listing.txt
Output Set: N:\CRF3\03072002\I830338.raw

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3 <110> APPLICANT: IKEDA, Johe
              SAKAI, Harumi
      6 <120> TITLE OF INVENTION: Monoclonal Antibodies Against Human Apoptosis Inhibitory
Protein NAIP,
              and Method For Assaying the NAIP
      9 <130> FILE REFERENCE: 2001-0515A/WMC/00653
     11 <140> CURRENT APPLICATION NUMBER: 09/830,338
C--> 12 <141> CURRENT FILING DATE: 2001-08-13
     14 <150> PRIOR APPLICATION NUMBER: PCT/JP99/05841
     15 <151> PRIOR FILING DATE: 1999-10-22
     亞 <160> NUMBER OF SEQ ID NOS: 2
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        <212> TYPE: PRT
        <213> ORGANISM: Homo sapiens
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     26
                                                 10
     \overline{27}
          His Asn Leu Leu Pro Glu Leu Ser Ala Leu Leu Gly Leu Asp Ala Val
     28
                                             25
     29
          Gln Leu Ala Lys Glu Leu Glu Glu Glu Glu Gln Lys Glu Arg Ala Lys
     <u>30</u>
                                        40
          Met Gln Lys Gly Tyr Asn Ser Gln Met Arg Ser Glu Ala Lys Arg Leu
          Lys Thr Phe Val Thr Tyr Glu Pro Tyr Ser Ser Trp Ile Pro Gln Glu
     34
                                70
     35
          Mét Ala Ala Ala Gly Phe Tyr Phe Thr Gly Val Lys Ser Gly Ile Gln
     36
                                                 90
     37
          Cys Phe Cys Cys Ser Leu Ile Leu Phe Gly Ala Gly Leu Thr Arg Leu
     38
                                           105
     39
          Pro Ile Glu Asp His Lys Arg Phe His Pro Asp Cys Gly Phe Leu Leu
     40
                                       120
                                                            125
     41
          Asn Lys Asp Val Gly Asn Ile Ala Lys Tyr Asp Ile Arg Val Lys Asn
     42
                                   135
     43
          Leu Lys Ser Arg Leu Arg Gly Gly Lys Met Arg Tyr Gln Glu Glu Glu
     44
                               150
                                                    155
     45
          Ala Arg Leu Ala Ser Phe Arg Asn Trp Pro Phe Tyr Val Gln Gly Ile
                                                170
     47
          Ser Pro Cys Val Leu Ser Glu Ala Gly Phe Val Phe Thr Gly Lys Gln
     48
                      180
                                           185
     49
          Asp Thr Val Gln Cys Phe Ser Cys Gly Gly Cys Leu Gly Asn Trp Glu
     50
                                       200
                                                            205
          Glu Gly Asp Asp Pro Trp Lys Glu His Ala Lys Trp Phe Pro Lys Cys
     51
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215

220

52

41



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TIME: 15:41:41

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Glu Phe Leu Arg Ser Lys Lys Ser Ser Glu Glu Ile Thr Gln Tyr Ile Gln Ser Tyr Lys Gly Phe Val Asp Ile Thr Gly Glu His Phe Val Asn Ser Trp Val Gln Arg Glu Leu Pro Met Ala Ser Ala Tyr Cys Asn Asp Ser Ile Phe Ala Tyr Glu Glu Leu Arg Leu Asp Ser Phe Lys Asp Trp Pro Arg Glu Ser Ala Val Gly Val Ala Ala Leu Ala Lys Ala Gly Leu Phe Tyr Thr Gly Ile Lys Asp Ile Val Gln Cys Phe Ser Cys Gly Gly Cys Leu Glu Lys Trp Gln Glu Gly Asp Asp Pro Leu Asp Asp His Thr Arg Cys Phe Pro Asn Cys Pro Phe Leu Gln Asn Met Lys Ser Ser Ala Glu Val Thr Pro Asp Leu Gln Ser Arg Gly Glu Leu Cys Glu Leu Leu 7.1 Glu Thr Thr Ser Glu Ser Asn Leu Glu Asp Ser Ile Ala Val Gly Pro Ile Val Pro Glu Met Ala Gln Gly Glu Ala Gln Trp Phe Gln Glu Ala Lys Asn Leu Asn Glu Gln Leu Arg Ala Ala Tyr Thr Ser Ala Ser Phe Arg His Met Ser Leu Leu Asp Ile Ser Ser Asp Leu Ala Thr Asp His 7:9 Leu Leu Gly Cys Asp Leu Ser Ile Ala Ser Lys His Ile Ser Lys Pro Val Gln Glu Pro Leu Val Leu Pro Glu Val Phe Gly Asn Leu Asn Ser Val Met Cys Val Glu Gly Glu Ala Gly Ser Gly Lys Thr Val Leu Leu 85 86 Lys Lys Ile Ala Phe Leu Trp Ala Ser Gly Cys Cys Pro Leu Leu Asn Arg Phe Gln Leu Val Phe Tyr Leu Ser Leu Ser Ser Thr Arg Pro Asp Glu Gly Leu Ala Ser Ile Ile Cys Asp Gln Leu Leu Glu Lys Glu Gly Ser Val Thr Glu Met Cys Met Arg Asn Ile Ile Gln Gln Leu Lys Asn Gln Val Leu Phe Leu Leu Asp Asp Tyr Lys Glu Ile Cys Ser Ile Pro Gln Val Ile Gly Lys Leu Ile Gln Lys Asn His Leu Ser Arg Thr Cys Leu Leu Ile Ala Val Arg Thr Asn Arg Ala Arg Asp Ile Arg Arg Tyr Leu Glu Thr Ile Leu Glu Ile Lys Ala Phe Pro Phe Tyr Asn Thr Val Cys Ile Leu Arg Lys Leu Phe Ser His Asn Met Thr Arg Leu Arg Lys



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102		610					615					620				
103	Phe		Val	Tvr	Phe	Glv		Asn	Gln	Ser	Leu		Lvs	Tle	Gln	Lvs
104	625			-1-		630	-1-				635	V	-70			640
105		Pro	T.e.ii	Phe	Va 1		Δla	Ile	Cvg	Δla		Tro	Dhe	Gln	Ͳυν	
106	1111	110	Deu	1110	645	1114	1114		0,10	650	1115	111	LIIC	OIII	655	110
107	Dhe	λen	Dro	Sor		Δen	Aen	Val	λla		Dha	Lve	Sor	Фиг		Glu
107	FIIC	АЗР	FIQ	660	FIIC	чэр	изЬ	V 44.1	665	141	rne	пуз	261	670	мес	Giu
109	Ara	Τ.Δ11	Sor		λra	Nen	Luc	Ala		λla	Glu	Tla	Lan		λla	Thr
110	nry	Бец	675	Deu	nry	กรแ	цуз	680	1111	niu	GIU	116	685	цуз	пта	1111
111	Val	Sar		Cve	Glv	Glu	Τ.Δ11	Ala	Τ.Δ11	T.ve	G1 v	Dha		Sar	Cvc	Cvc
112	VUI	690	Jei	Cys	GLY	Giu	695	AIU	Бец	цуз	GLY	700	FIIC	Ser	Cys	Cys
113	Dho		Dha	λen	Men	Aen		Leu	Δla	Glu	λla		Va 1	Men	Glu	λen
114	705	GIU	riic	no.	upb	710	nsp	пси	niu	OIU	715	GLY	, a ₁	изр	GIU	720
115		λen	Lou	Thr	Mot		T.Ou	Met	Sor	Lare		Thr	λla	Gln	λτα	
116	GIU.	usb	пеа	1111	725	Cys	Бец	MCC	JUL	730	rne	1111	ліа	GIII	735	Бец
117	λκα	Dro	Dho	Tur		Dho	Lon	Ser	Dro		Dho	Cln	Clu	Dho		λla
11,8	AIG	FIU	FIIC	740	ALY	PIIE	ьęu	261	745	иτα	FILE	GIII	GIU	750	ьеи	нта
119	C1**	Mot	7 20	•	T10	Clu	LOU	Leu		Cor	N an	λνα	Cln		Uic	Cln
-	СТУ	Mec	755	Leu	TIE	GIU	Leu	760	иор	ser	ASP	AIG	765	GIU	urs	GIII
$\frac{1.20}{1.21}$	A an	LOU		T 011	m	uic	LOU		C1 n	т1.	7 02	602		Wot	Wot	mh~
122	ASP	770	GIY	Leu	TAT	HIS	775	Lys	GLII	TTE	ASII		PIO	Met	Mec	THE
123	17.0.7		3 l o	M	7 ~~	3	–	T 0.11	3	M	17.0.1	780	0	T	Dwa	C
124	785	ser	Ата	туг	ASII	790	Phe	Leu	ASII	TYL	795	ser	ser	neu	PLO	
125		T	ת 1 ת	C1	Dwo		T1.	W- 1	C02	II i o		T 011	II i a	Tou	175]	800
125 126	LIII	ьуѕ	нта	СТА		гуз	тте	Val	ser	810	ьeu	ьeu	нтѕ	ьeu	815	ASP
127	200	T	C1	Com	805	C1	2 4 2	т1.	Com		200	7.00	7 00	M		T
	ASII	гуя	GIU		ьeu	GIU	ASII	Ile		GIU	ASII	Asp	ASP	830	ьец	ьуѕ
128 129	TT d o	C1 =	D=0	820	T1.	000	T 011	015	825 Wat	@1 m	T 011	T 011	7		T 011	Птт
	піѕ	GTII	835	GLU	TTE	ser	ьеu	Gln 840	Met	GIII	теи	ьеu	845	GLY	ьеu	пр
1÷3€0	Cln	T10	_	Dro	C15	λla	Шттъ		602	Mot	Val	cor		ui c	T 011	Tais
1 <u>3</u> 1	GIII	850	Cys	PIO	GIII	нта	855	Phe	ser	мес	val	860	GIU	HIS	ьеu	Leu
1 <u>3</u> 2 133	v. l		» 1 ~	T 011	T	mh		Tyr	C1 m	000	200		170 1	λl-	31 0	0
F34	865	Leu	АТа	пеп	пуъ	870	АТа	TÄT	GIII	per	875	TIIT	vai	АТа	АТА	880
135		Dro	Dho	17 a l	Tou		Dho	Leu	Cln	C1 11		mh r	T 011	mhr	Tou	
136	per	PIO	FIIC	Val.	885	GIII	FIIE	Deu	GIII	890	лгу	1111	пеп	1111	895	СТУ
137	פות	LOU	λen	LOU		Tur	Dho	Phe	λen		Bro	C111	50r	LON		Tou
138	мта	ьец	ASII	900	GIII	тут	Pile	Pne	905	птэ	PLO	GIU	ser	910	ser	rea
139	T 011	λrα	Sor		uic	Dho	Dro	Ile		C111	λαn	Two	Th.~		Dro	7 200
140	пеа	AIG	915	TTE	птэ	FIIE	PIO	920	ALY	GLY	ASII	пуз	925	261	PIO	AIG
141	λla	uic		Sor	Va l	LAn	Glu	Thr	Cvc	Dho	λen	T.370		Cln	Wa l	Dro
142	Ala	930	FIIC	261	Val	пеп	935	TILL	Cys	FIIC	тэр	940	26T	GIII	Val	PIO
143	Thr		λen	Gln.	λen	Пагас		Ser	λla	Dho	Glu.		Mot	λen	G111	Trn
144	945	116	тэр	GIII	rap	950	AIG	Ser	Аца	rne	955	PIO	мес	ASII	GIU	960
145.		λνα	λen	Τ.Διι	Δla		Luc	Glu	λen	λen		Tare	Sor	Фил	Mot	
146	GIU	47.9	บจแ	Leu	965	Giu	nyo	GLU	ოახ	970	v a ı	пλэ	261	- A -	975	νaħ
147	Met	Gln	Δτα	Δτα		Ser	Dro	Asp	Leu		Thr	G117	ጥ፣፣ኍ	Tro		Lou
148	TIG L	0111	AT 9	980	asu	767		ռոր	985	DET	1 11 I	GIY	- 7 T	990	υλο	.ueu
149	Ser	Pro	T.vc		Tur	T.v.c	Tle	Pro		T.e.n	Glu	Val	Aen		Δen	Aen
150	501	110	995	O T 11	* 1 *	درد		1000	C _I S	Lcu	JIU		1005	7 U.L	n J II	Tob
100			,,,				-	-000				-	.000			



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151 152		Gln Asp Met Leu Glu · 1015	Ile Leu Met Thr Val Phe 1020	
153 154	Ser Ala Ser Gln Arg 1025	Ile Glu Leu His Leu 1030	Asn His Ser Arg Gly Phe 1035 1040	
155 156	Ile Glu Ser Ile Arg 1045		Ser Lys Ala Ser Val Thr 1055	
157 158	Lys Cys Ser Ile Ser 1060		Ala Ala Glu Gln Glu Leu 1070	
159 160			Glu Val Ser Gly Thr Ile 1085	
161	Gln Ser Gln Asp Gln	Ile Phe Pro Asn Leu	Asp Lys Phe Leu Cys Leu	
162	1090	1095	1100	
163 164	1105	Asp Leu Glu Gly Ash	Ile Asn Val Phe Ser Val	
165			Met Glu Lys Leu Leu Ile	-
166	1125	1130	1135	
167	Gln Ile Ser Ala Glu		Leu Val Lys Leu Ile Gln	
1 <u>6</u> 8	1140	1145	1150	
169			Lys Cys Asn Phe Phe Ser	
170	1155	1160	1165	
171 172	1170	1175	Ser Cys Lys Leu Thr 1180	
173	· •		Ala Val Pro Phe Val Ala	
174	1185	-	1195 1200	
175			Leu Asn Leu Glu Gly Gln	
1 76	1205	1210	1215	
1 77	Gln Phe Pro Asp Glu	Glu Thr Ser Glu Lys	Phe Ala Tyr Ile Leu Gly	
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179	Ser Leu Ser Asn Leu	Glu Glu Leu Ile Leu	Pro Thr Gly Asp Gly Ile	
1.80	1235	1240	1245	
<u>18</u> 1			Cys Gln Gln Leu His Cys	
1-82	1250	1255	1260	
183			Asn Asp Asp Ser Val Val	
184	1265		1275 1280 Phe Gln Lys Leu Glu Asn	J
185 186	1285	1290	1295	
187			Glu Glu Gly Tyr Arg Asn	
188	1300	1305	1310	
189			Leu Gln Glu Leu Asp Ile	
190	1315	1320	1325	
191	Ser Arg His Phe Thr	Glu Cys Ile Lys Ala	Gln Ala Thr Thr Val Lys	
192	1330	1335	1340	
193	_		Arg Leu Ile Arg Leu Asn	
194	1345		1355 1360)
195	-	-	Ile Ala Leu Leu Asn Val	
196	1365	1370	1375	
197	_		Leu Thr Ile Leu Gln Lys	
198 199	Trn Tle Leu Bro Phe	1385 Ser Pro Ile Ile Gln	1390	
TAA	TIP ITS TSU NIO NUE	per bio ite ite din	пλэ	



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1403

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1400

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202 <210> SEQ ID NO: 2
     203 <211> LENGTH: 5984
     204 <212> TYPE: DNA
     205 <213> ORGANISM: Homo sapiens
     207 <220> FEATURE:
W--> 208 <221> NAME/KEY: CDC
     209 <222> LOCATION: (292).,(4500)
     211 <400> SEQUENCE: 2
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     213 tgcctgttca tctacgacga accccgggta ttgaccccag acaacaatgc cacttcatat
                                                                             120
     214 tggggacttc gtctgggatt ccaaggtgca ttcattgcaa agttccttaa atattttctc
                                                                             180
                                                                             240
     215 actgetteet actaaaggae ggacagagea tttgttette ageeacatae ttteetteea
     216 ctggccagca ttctcctcta ttagactaga actgtggata aacctcagaa aatggccacc
                                                                             300
                                                                             360
     217 caqcaqaaaq cctctqacqa qaggatctcc cagtttgatc acaatttgct gccagagctg
     218 totqctcttc tgggcctaga tgcagttcag ttggcaaagg aactagaaga agaggagcag
                                                                             420
                                                                             480
     219 aaqqaqcqaq caaaaatqca qaaaqqctac aactctcaaa tqcqcaqtqa aqcaaaaaqq
     220 ttaaagactt ttgtgactta tgagccgtac agctcatgga taccacagga gatggcggcc
                                                                             540
     221 gctgggtttt acttcactgg ggtaaaatct gggattcagt gcttctgctg tagcctaatc
                                                                             600
                                                                             660
     222 ctetttggtg ceggeeteae gagaeteeee atagaagaee acaagaggtt teateeagat
     223 tgtgggttcc ttttgaacaa ggatgttggt aacattgcca agtacgacat aagggtgaag
                                                                             720
     2 aatctgaaga gcaggctgag aggaggtaaa atgaggtacc aagaagagga ggctagactt
                                                                             780
     225 qcatcettca ggaactggcc attttatgtc caagggatat eccettgtgt getetcagag
                                                                             840
                                                                             900
     226 gctggctttg tctttacagg taaacaggac acggtacagt gtttttcctg tggtggatgt
     227 ttaggaaatt gggaagaagg agatgateet tggaaggaae atgeeaaatg gtteeceaaa
                                                                             960
                                                                            1020
     228 tgtgaattte tteggagtaa gaaateetea gaggaaatta eecagtatat teaaagetae
     229 aagggatttg ttgacataac gggagaacat tttgtgaatt cctgggtcca gagagaatta
                                                                            1080
     20 cctatggcat cagettattq caatqacage atetttqctt acgaagaact acggetggae
     201 tottttaagg actggccccg ggaatcaget gtgggagttg cagcactggc caaagcaggt
                                                                            1200
     232 cttttctaca caggtataaa ggacatcgtc cagtgctttt cctgtggagg gtgtttagag
                                                                            1260
     233 aaatggcagg aaggtgatga cccattagac gatcacacca gatgttttcc caattgtcca
                                                                            1320
     名。 tttctccaaa atatgaagtc ctctgcggaa gtgactccag accttcagag ccgtggtgaa
     235 ctttqtqaat tactggaaac cacaagtgaa agcaatcttg aagattcaat agcagttggt
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    237 aatqaqcaqc tqaqaqcaqc ttataccaqc qccaqtttcc qccacatgtc tttgcttgat
    238 atotottocg atotggocac ggaccacttg otgggotgtg atotgtotat tgottoaaaa
                                                                            1620
    239 cacatcagca aacctgtgca agaacctctg gtgctgcctg aggtctttgg caacttgaac
                                                                            1680
    240 tetqteatqt qtqtqqaqqq tqaaqetqqa aqtqqaaaqa eqqteeteet qaaqaaaata
                                                                            1740
    241 gcttttctgt gggcatctgg atgctgtccc ctgttaaaca ggttccagct ggttttctac
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    242 ctctccctta gttccaccag accagacgag gggctggcca gtatcatctg tgaccagctc
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    243 ctagagaaag aaggatctgt tactgaaatg tgcatgagga acattatcca gcagttaaag
                                                                            1920
    244 aatcaggtct tattcctttt agatgactac aaagaaatat gttcaatccc tcaagtcata
    245 ggaaaactga ttcaaaaaaa ccacttatcc cggacctgcc tattgattgc tgtccgtaca
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    246 aacagggcca gggacatccg ccgataccta gagaccattc tagagatcaa agcatttccc
                                                                            2100
    247 ttttataata ctgtctgtat attacggaag ctcttttcac ataatatgac tcgtctgcga
                                                                            2160
    248 aagtttatgg tttactttgg aaagaaccaa agtttgcaga agatacagaa aactcctctc
                                                                            2220
    249 tttgtggegg egatetgtge teattggttt eagtateett ttgaceeate etttgatgat 2280
    250 gtggctgttt tcaagtccta tatggaacgc ctttccttaa ggaacaaagc gacagctgaa
    251 attotcaaaq caactqtqtc ctcctqtqqt qaqctqqcct tgaaagggtt tttttcatqt
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/830,338

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Input Set : A:\Ikeda Sequence Listing.txt
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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:208 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2

L:212 M:112 C: (48) String data converted to lower case,

M:112 Repeated in SeqNo=2

٠.;